REQUEST FOR ACCESS TO AN ABANDONED APPLICATION UNDER 37 CFR 1.14

Bring completed form to:
File Information Unit, Room 2E04
2900 Crystal Drive
Arlington, VA 22202-3514

RECEIVED

JAN 3 0 2008

Telephone: (703) 308-2733

In re Application of

Application Number	Filed
08/332,046	11/1/94

Paper No. #55

I hereby request access under 37 CFR 1.14(a)(1)(iv) to the application file record of the above-identified ABANDONED application, which is not within the file jacket of a pending Continued Prosecution Application (CPA) (37 CFR 1.53(d)) and which is identified in, or to which a benefit is claimed, in the following document (as shown in the attachment):

United States Patent Application Publication No. _____, page, _____ line _____,

United States Patent Number 6248516 column _____, line, _____ or

WIPO Pub. No. _____, page _____, line _____.

Related Information About Access to Applications Maintained in the Image File Wrapper System (IFW) and Access to Pending Applications in General

A member of the public, acting without a power to inspect, cannot order applications maintained in the IFW system through the FIU. If the member of the public is entitled to a copy of the application file, then the file is made available through the Public Patent Application Information Retrieval system (Public PAIR) on the USPTO internet web site (www.uspto.gov). Terminals that allow access to Public PAIR are available in the Public Search Room. The member of the public may also be entitled to obtain a copy of the application file upon payment of the appropriate fee. Such copies must be purchased through the **Office of Public Records** upon payment of the appropriate fee (37 CFR 1.19(b)).

For **published** applications that are still pending, a member of the public may obtain **a copy** of:
the file contents; the pending application as originally filed; or any document in the file of the pending application.

For **unpublished** applications that are still pending:
(1) If the benefit of the pending application is claimed under 35 U.S.C. 119(e), 120, 121, or 365 in another application that has: (a) issued as a U.S. patent, or (b) published as a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain **a copy** of: the file contents; the pending application as originally filed; or any document in the file of the pending application.
(2) If the application is incorporated by reference or otherwise identified in a U.S. patent, a statutory invention registration, a U.S. patent application publication, or an international patent application publication in accordance with PCT Article 21(2), a member of the public may obtain **a copy** of the pending application as originally filed.

_____ Signature

Typed or printed name

Registration Number, if applicable

703-486-1150

Telephone Number

1/30/08

Date

FOR PTO USE ONLY

RECEIVED

Approved by: _____ (initials)

Unit: JAN 3 0 2008

File Information Unit

#55

(12) **United States Patent** (10) Patent No.: **US 6,248,516 B1**

Winter et al. (45) Date of Patent: **Jun. 19, 2001**

(54) **SINGLE DOMAIN LIGANDS, RECEPTORS COMPRISING SAID LIGANDS METHODS FOR THEIR PRODUCTION, AND USE OF SAID LIGANDS AND RECEPTORS**

(75) Inventors: **Gregory Paul Winter; Elizabeth Sally Ward**, both of Cambridge; **Detlef Güssow**, Abington, all of (GB)

(73) Assignee: **Medical Research Council**, London (GB)

(*) Notice: Subject to any disclaimer, the term of this patent is extended or adjusted under 35 U.S.C. 154(b) by 0 days.

(21) Appl. No.: **08/470,031**

(22) Filed: **Jun. 6, 1995**

Related U.S. Application Data

(62) Division of application No. 08/332,046, filed on Nov. 1, 1994, which is a continuation of application No. 07/796,805, filed on Nov. 25, 1991, which is a division of application No. 07/580,374, filed on Sep. 11, 1990, now abandoned.

(30) **Foreign Application Priority Data**

Nov. 11, 1988	(GB)	....	8826444
Mar. 16, 1989	(GB)	....	8906034
Apr. 22, 1989	(GB)	....	8909217
May 15, 1989	(GB)	....	8911047
Jun. 2, 1989	(GB)	....	8912652
Jun. 16, 1989	(GB)	....	8913900
Aug. 15, 1989	(GB)	....	8918543
Nov. 13, 1989	(WO)	....	PCT/GB89/01344

(51) Int. Cl.[7] **C12Q 1/68**

(52) U.S. Cl. **435/6; 435/69.6; 435/252.33; 435/441; 435/446**

(58) Field of Search 435/240.2, 252.3, 435/252.33, 6, 69.6, 441, 446; 536/23.7, 23.4, 23.5, 23.6

(56) **References Cited**

U.S. PATENT DOCUMENTS

4,356,270	10/1982	Itakura .
4,642,334	2/1987	Moore et al. .
4,656,134	4/1987	Ringold .
4,683,195	7/1987	Mullis et al. .
4,683,202	7/1987	Mullis .
4,704,692	11/1987	Ladner .
4,711,845	12/1987	Gelfand et al. .
4,714,681	12/1987	Reading .
4,800,159	1/1989	Mullis et al. .
4,806,471	2/1989	Molin et al. .
4,816,397	3/1989	Boss et al. .
4,889,818	12/1989	Gelfand et al. .
4,937,193	6/1990	Hinchliffe et al. .
4,946,786	8/1990	Tabor et al. .
4,959,317	9/1990	Sauer .

4,965,188	10/1990	Mullis et al. .
4,978,743	12/1990	Selbeck et al. .
4,983,728	1/1991	Herzog et al. .
5,023,171	6/1991	Ho et al. .

(List continued on next page.)

FOREIGN PATENT DOCUMENTS

2016841	11/1990	(CA) .
2019323	12/1990	(CA) .
0 120 694	10/1984	(EP) .
0 125 023	11/1984	(EP) .
0 171 496	2/1986	(EP) .
0 173 494	3/1986	(EP) .
0 194 276 B1	9/1986	(EP) .
0 200 362	12/1986	(EP) .
0 201 184 B1	12/1986	(EP) .
0 239 400	9/1987	(EP) .
0 368 684	5/1990	(EP) .
2 137 631	10/1984	(GB) .
61-104788	5/1986	(JP) .
63-152984	6/1988	(JP) .
WO 86/01533	3/1986	(WO) .
WO 87/02671 *	5/1987	(WO) .
WO-A 88/01649	3/1988	(WO) .
WO 88/ 0663	9/1988	(WO) .
WO 88/06630	9/1988	(WO) .
WO 88/09344	12/1988	(WO) .
WO 89/00999	2/1989	(WO) .
WO 90/14424	11/1990	(WO) .
WO 90/14430	11/1990	(WO) .
WO 90/14443	11/1990	(WO) .
WO-A 97/08320	3/1997	(WO) .

OTHER PUBLICATIONS

Kokubu, F., et al, *The EMBO Journal*, vol. 7, No. 7, pp. 1979–1988, 1988 "Complete structure and organization of immunoglobulin heavy chain constant region genes in a phylogenetically primitive vertebrate".

Schwager, J., et al, *Proc. Natl. Acad. Sci. USA*, vol. 85, pp. 2245–2249, Apr. 1988 Immunology "Amino acid sequence of heavy chain from *Xenopus laevis* IgM deduced from cDNA sequence: Implications for evolution of immunoglobulin domains".

Roth, M.E., et al, *Science*, vol. 241, pp. 1354–1358, Sep. 9, 1988 "Selection of Variable–Joining Region Combinations in the α Chain of the T Cell Receptor".

(List continued on next page.)

Primary Examiner—James Ketter

(74) *Attorney, Agent, or Firm*—Nixon & Vanderhye PC

(57) **ABSTRACT**

The present invention relates to single domain ligands derived from molecules in the immunoglobulin (Ig) superfamily, receptors comprising at least one such ligand, methods for cloning, amplifying and expressing DNA sequences encoding such ligands, preferably using the polymerase chain reaction, methods for the use of said DNA sequences in the production of Ig-type molecules and said ligands or receptors, and the use of said ligands or receptors in therapy, diagnosis and catalysis.

21 Claims, 23 Drawing Sheets